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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/632,853	08/04/2000	Theodore Rappaport	0256033AA	2273

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EXAMINER
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ORTIZ RODRIGUEZ, CARLOS R

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/632,853

Applicant(s)

RAPPAPORT ET AL.

Examiner

Carlos Ortiz-Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 9/06/05 have been fully considered. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. In view of the results of the interview and applicant's amendment the Examiner notes that The EAC-50 reference is oriented towards installation and operation of a system and does not indicate the relationship between the claimed computer program and the claimed computerized model. Although, considered as a 102 reference previously, in view of the 9/06/05 amendments to the claims, the reference does not teach a computer implemented method comprising the step of utilizing a computer program and a computerized model to determine if the attributes of one or more of said system components will prevent the proper installation or operation of a communication network formed from the selected specific components for a specific design for the physical environment, and, if said attributes will prevent the proper installation or operation of said communications network providing an indication of a fault in one or more design parameters of said communications network.

It should be noted that the main issues addressed at the interview was whether the claimed computer program is one single executable computer program (stored, for example, in a compact disc) that has the capability of generating the computerized model or if it is the operating system program coordinating multiple application programs (for example coordinating one application program to execute the program and coordinating another application program to generate the computerized model).

Regarding this issue applicants desire to have coverage for both scopes as stated at the Interview and in the Remarks of 09/06/05. Applicant's amendment of 5/11/05 were intended to require that the same computer program (i.e., "said computer program") is used for the steps of providing a computerized model, providing attributes for a plurality of system components, selecting specific components, and representing the selected components. However, claims 5, 7, 8 and 11 were not amended in such manner. Applicants asserted that the computerized model may be generated by the claimed computer program or by a different program.

Furthermore, applicants indicated in the Remarks of 09/06/05 (Page 7) that what is important in this invention is that the program provides the designer or operator with an indication under computer control, that a certain component configuration will result in a fault in design parameters for a communication system at a specific physical location. It should be noted that such features are known in this art see for example U.S. Patent No. 6,931,364 to Anturna (C2 L54-59) which teaches indicating interferences between components. Also see SitePlanner 3.0 User's Manual pages 101-102 (when a fault in design occurs the list box in Figure 5.17 is empty).

***Requirements for Information 37 CFR 1.105***

2. An issue of public use or on sale activity has been raised in this application. In order for the examiner to properly consider patentability of the claimed invention under 35 U.S.C. 102(b), additional information regarding this issue is required as follows: factual information (not opinions) regarding the applicant's actual knowledge regarding the facts to public use and sale situation. Identification of any use of the claimed invention known to any of the inventors at the

time the application was filed notwithstanding the date of the use is required. This information is required in view of the prior art of record (for example prior art related to SitePlanner).

Applicant is reminded that failure to fully reply to this requirement for information will result in a holding of abandonment.

***Claim Rejections - 35 USC § 103***

3. Claim 1-55 rejected under 35 U.S.C. 102(a) as being anticipated by Rappaport et al., "SitePlanner 3.0 User's Manual", Wireless Valley Communications, Inc., 1998.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Regarding claim 1, 4, 5, 7, 8, 11, 12, 15, 16, 18, 19, 22-24, 27, 29, 30-33, 35, 37, 40, 41, 43, 44, 46, 47, 49, 50, 52, 53 and 55 SitePlanner discloses a computer implemented method for designing or deploying a wireless communications network (Page 79), comprising the steps of: providing a computerized model which represents an indoor and/or outdoor physical environment in which a communications network is or will be installed, said computerized model providing a display of at least a portion of said physical environment (Page 96); providing with said computer program attributes for a plurality of system components which may be used in said physical environment; selecting using said computer program specific components from said plurality of system components for use in said computerized model; representing using said computer and said computerized model, said selected specific components in said display (Page 97 and Page 102); and determining, using said computer program and said computerized model, if said attributes of one or more of said system components will prevent the proper installation or operation of a communications network formed from said selected specific components, and, if

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said attribute will prevent the proper installation or operation of said communication network, providing an indication of a fault in one or more design parameters of said communications network (Page 95 and Pages 100-102). The method further generating a bill of materials containing cost information for said selected specific components utilized in said communications network and the steps wherein faults occurs when cost limits are exceeded is implicitly discloses by SitePlanner (Pages 14 and 44 and 97). The limitation wherein faults occurs when a brand choice is not selected in said selecting step and when there are mismatches in the maintenance schedules of said selected specific components is implicitly disclosed by SitePlanner (see for example Pages 101-102).

Regarding claims 2, 13, 25, 38 and 48 SitePlanner discloses the method wherein said attributes include performance attributes and further comprising the step of running prediction models using the computerized model and said performance attributes to predict performance characteristics of a communications network composed of said selected specific components if said attributes of said system components do not prevent the proper installation or operation of said communications network (Page 79 and 97)

Regarding claim 3, 14, 26, 34 and 39 SitePlanner discloses the method wherein said attributes include frequency dependent characteristics of said selected components and said prediction models utilize said frequency dependent characteristics in calculations which predict said performance characteristics of said communications network (Page 79 and 95 and 97)

Regarding claim 6, 17, 28, 36, 42, and 51 the method wherein said display is three dimensional inherent to SitePlanner.

Regarding claim 9-10, 20-21, 45 and 54 SitePlanner discloses the method wherein said fault results from improper connections between two or more of said selected specific components (Page 101 and Page 102).

***Citation of Pertinent Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to method and system for designing or deploying a communication network which considers component attributes:

- a. U.S. Pat. No. 6,283,759 to Price et al., which discloses system for demonstrating compliance with standards.
- c. U.S. Pat. No. 6,338,031 to Lee et al., which discloses computer-implemented inbuilding prediction modeling for cellular telephone systems.
- b. U.S. Pat. No. 6,931,364 to Anturna, which discloses volume detailed building structure.

The following publications are cited to further show the state of the art with respect to method and system for designing or deploying a communication network which considers component attributes:

- c. Hashemi, Homayoun, "The indoor radio propagation channel", IEEE, 1993.

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- d. Liu et al., "Modelling microcellular radio wave propagation", IEEE, 1996.
- e. Fellner et al., "MRT – A tool for simulations in 3D geometric domains", ESM, 1997.
- f. Stamm et al., "A prototype system for light propagation in terrains", IEEE, 1998.
- g. Fellner, Deiter, "Radio wave propagation (CARPET)", Computer Graphics, Dept. of Computer Science, 1998.
- h. Rappaport et al., "The future of wireless communications", MPRG, 1999.
- i. Zhang, Wei, "Formulation of multiple diffraction by trees and buildings for radio propagation predictions for local multipoint distribution service", J. Res. Natl. Inst. Stand. Technol., 1999.
- j. Ulffe et al., "Measuring the 2.4 GHz Band for indoor wireless communications", Wireless design laboratory, 2000.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37



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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Ortiz-Rodriguez whose telephone number is (571) 272-3747. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The central official fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the general information number at 800-786-9199.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Carlos Ortiz-Rodriguez  
Patent Examiner  
Art Unit 2125

A handwritten signature in black ink, appearing to read "L. P. Picard", with a stylized flourish at the end.

cror

November 23, 2005

**LEO PICARD**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**